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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,518	08/27/2001	Paul-Walter Baier	449122009400	4278

25227 7590 10/21/2003

MORRISON & FOERSTER LLP  
1650 TYSONS BOULEVARD  
SUITE 300  
MCLEAN, VA 22102

EXAMINER

TRAN, KHANH C

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 10/21/2003

*Handwritten number 13*

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/889,518

Applicant(s)

BAIER ET AL.

Examiner

Khanh Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,8-13,16-22 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-13,16-22 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The Request for Reconsideration filed on 08/01/2003 has been entered.

Claims 1-5, 8-13, 16-22 and 27 have been entered.

### ***Response to Arguments***

2. Applicant's arguments filed on 08/01/2003 have been fully considered but they are not persuasive.

In response to Applicant's arguments on claim 1, Smith discloses flowcharts of two similar cases in figure 7 and figure 8. Figure 8, which the Examiner uses as a basis for the rejection argument in previous Office action, illustrates a protocol employed by a first base station and a second base station to communicate data there between. Figure 7 illustrates a protocol employed by a base station and a mobile unit, which represents a user, to communicate data there between. The difference between the foregoing two cases is that in the case of communications between the base station and the mobile station, the mobile unit is not equipped with adaptive sectored antenna since a sectored antenna is typically bulky and is not physically practical. Only the base station adaptively steer the adaptive sectored antenna. While in the case of communications between the first base station and the second base station, both base stations are equipped with adaptive sectored antennas, and either base station adaptively steer their respective arrays to achieve a minimum bit error rate (BER) and a maximum receive signal strength indication (RSSI). Hence, both cases are similar and the rejection should

be the same for the protocol illustrated in the figure 7. In the case of a base station and a mobile station, the base station obtains the BER and the RSSI, which represent the quantitative information about the mobile station. Each value of the BER and the RSSI is inherently computed differently by using different signal processing algorithms, and both signal-processing algorithms represent the claimed first and second signal processing algorithms. The base station steers its adaptive sectored antenna to meet the BER and RSSI thresholds with respect to the mobile unit. Since the quantitative values of both BER rate and RSSI are utilized to improve the quality of the transmission of the data transmission as claimed in the instant application, hence, both quantitative values inherently contain interference information of the received signals. Therefore, the foregoing portions of Smith et al. teachings clearly address the claimed features "utilizing information on received interference signals to improve the quality of the transmission of the data transmission" and "obtaining quantitative information about the received interference signals from the received signals of one of the antennas and the quantitative information obtained about the received user signals by using a second signal processing algorithm ...".

Regarding claim 27, said claim has similar scope as claim 1 and has been rejected using the same rejection argument of claim 1. The Examiner still maintains the same rejection.

Regarding claims 2 and 17, the Examiner still maintains the rejection of both claims in addition to dependency on claim 1.

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Regarding claims 3-5, 8-13, 16 and 18-22, the Examiner still maintains the rejection of both claims under 35 USC 103(a) since both Van Heeswyk (US 6,333,947) and Raleigh (US 6,144,711) make up all the deficiencies that Smith et al. lacks, and in addition to dependency on claim 1.

### ***Conclusion***

**3. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

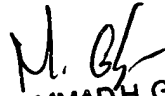
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 703-305-2384. The examiner can normally be reached on Tuesday - Friday from 08:00 AM - 05:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 703-306-3034. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

KCT

  
MOHAMMAD H. GHAYOUR  
PRIMARY EXAMINER